GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: January 8, 2002, 21:37:54 ; Search time 108.09 Seconds
(without alignments)
10802.821 Million cell updates/sec

Title: US-09-635-521A-1
Perfect score: 1362
Sequence: 1 atggcttcacccagcctccc.....ttcaggagcatgaagtttga 1362

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 930621 seqs, 428662619 residues

number of hits satisfying chosen parameters: 1861242

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_1101:*
1: /SIDS2/gcgdata/geneseq/geneseqn/NA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn/NA1981.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn/NA1982.DAT:*
4: /SIDS2/gcgdata/geneseq/geneseqn/NA1983.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn/NA1984.DAT:*
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11: /SIDS2/gcgdata/geneseq/geneseqn/NA1990.DAT:*
12: /SIDS2/gcgdata/geneseq/geneseqn/NA1991.DAT:*
13: /SIDS2/gcgdata/geneseq/geneseqn/NA1992.DAT:*
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21: /SIDS2/gcgdata/geneseq/geneseqn/NA2000.DAT:*
22: /SIDS2/gcgdata/geneseq/geneseqn/NA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	508.6	37.3	1953	21	AAF22400	Human secreted pro
2	508.6	37.3	1956	22	AAF64188	Human secreted pro
c 3	497.6	36.5	1890	22	AAF93845	Human cDNA encodin
4	236.6	17.4	587	22	AAF94186	Primer specific fo
5	165.2	12.1	1254	17	AAT33127	Human neurotensin
6	158.6	11.6	444	22	AAH50766	Human tumour assoc
7	102.6	7.5	1203	22	AAF85448	Nucleotide sequenc
8	97.6	7.2	1551	21	AAZ49491	Human NT2LP protei
9	97.6	7.2	1575	19	AAV07655	cDNA encoding a hu
10	97.6	7.2	2850	21	AAZ49492	Human NT2LP protei
11	96.2	7.1	1092	21	AAZ45405	DNA encoding the p
12	96.2	7.1	1092	22	AAF85450	Nucleotide sequenc
13	95.8	7.0	1342	19	AAV62449	Human neurotensin
14	89.4	6.6	729	22	AAF85107	Nucleotide sequenc
c 15	89.4	6.6	801	22	AAH50977	Human nGPCR15 codi
16	89.4	6.6	1245	22	AAH43072	Nucleotide sequenc
17	89.4	6.6	1245	22	AAH43075	Nucleotide sequenc
18	89.4	6.6	1248	21	AAD01123	Human orphan G pro
19	89.4	6.6	1248	21	AAA46022	Human G protein co
20	89.4	6.6	1248	22	AAH49526	Human GTP-binding
21	89.4	6.6	1298	22	AAD08008	Human G-protein co
22	89.4	6.6	1360	21	AAZ33297	Human neurotensin-
23	89.4	6.6	1594	22	AAF80326	Splice variant of
24	89.4	6.6	1594	22	AAF80327	Splice variant of
25	89.4	6.6	1658	22	AAF80322	Nucleotide sequenc
26	89.4	6.6	1658	22	AAF80323	Nucleotide sequenc
27	89.4	6.6	1658	22	AAF80324	Nucleotide sequenc
28	89.4	6.6	1658	22	AAF80325	Nucleotide sequenc
29	82	6.0	1088	18	AAT68664	Human growth hormo
30	82	6.0	1088	18	AAT69756	Human growth hormo
31	82	6.0	1101	21	AAA30643	Human G protein-co
32	82	6.0	1101	21	AAA30732	DNA encoding human
33	82	6.0	1101	21	AAZ51463	Human G protein-co
34	82	6.0	1101	22	AAF83680	Human G-protein co
35	82	6.0	1122	18	AAT68665	Human growth hormo
36	82	6.0	1122	18	AAT69757	Human growth hormo
37	78.6	5.8	836	18	AAT68666	Human growth hormo
38	78.6	5.8	836	18	AAT69758	Human growth hormo
39	77.2	5.7	1092	18	AAT69760	Rat growth hormone
40	77.2	5.7	1092	22	AAH27800	Rat growth hormone
41	77.2	5.7	3129	18	AAT68667	Rat growth hormone
42	77.2	5.7	3129	18	AAT69759	Rat growth hormone
43	76.2	5.6	1239	21	AAZ45403	cDNA encoding the
44	76.2	5.6	1239	22	AAF83683	Long form of motil
45	76.2	5.6	1239	22	AAF85449	Nucleotide sequenc

ALIGNMENTS

RESULT 1
AAF22400
ID AAF22400 standard; cDNA; 1953 BP.
XX
AC AAF22400;
XX
DT 26-MAR-2001 (first entry)
XX
DE Human secreted protein gene 28 SEQ ID NO:38.
XX
KW Human; secreted protein; diagnosis; immunosuppressive; antiarthritic;
KW antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic;
KW cerebroprotective; nootropic; neuroprotective; antibacterial; virucide;
KW fungicide; ophthalmological; gene therapy; autoimmune disease; neoplasm;
KW rheumatoid arthritis; hyperproliferative disorder; cardiac arrest;
KW cardiovascular disorder; cerebrovascular disorder; cerebral ischaemia;
KW angiogenesis; nervous system disorder; Alzheimer's disease; infection;
KW ocular disorder; corneal infection; wound healing; skin aging;
KW food additive; preservative; ss.
XX
OS Homo sapiens.
XX
PN WO200061629-A1.
XX
PD 19-OCT-2000.
XX
PF 06-APR-2000; 2000WO-US09071.
XX
PR 09-APR-1999; 99US-0128694.
PR 20-JAN-2000; 2000US-0176931.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
PA (ROSE/) ROSEN C A.
XX

PI Ruben SM, Komatsoulis G;
XX
DR WPI; 2000-647420/62.
DR P-PSDB; AAB63161.
XX
PT Isolated nucleic acid molecule encoding a human secreted protein is
PT used in preventing, treating or ameliorating a medical condition -
XX
PS Claim 1; Page 440; 533pp; English.
XX
CC AAF22373 to AAF22421 encode the human secreted proteins given in AAB63134
CC to AAB63182. AAB63183 to AAB63231 represent more human secreted proteins
CC and polypeptides homologous to them. Human secreted proteins have
CC activities based on the tissues and cells the genes are expressed in.
CC Examples of activities include: immunosuppressive; antiarthritic;
CC antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic;
CC cerebroprotective; nootropic; neuroprotective; antibacterial; virucide;
CC fungicide; and ophthalmological. The polynucleotides and proteins can be
CC used to prevent, treat or ameliorate a medical condition in e.g. humans,
CC mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They are
CC also used in diagnosing a pathological condition or susceptibility to a
CC pathological condition. Disorders which are diagnosed or treated include
CC autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative
CC disorders e.g. neoplasms of the breast or liver, cardiovascular
CC disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral
CC ischaemia, angiogenesis, nervous system disorders e.g. Alzheimer's
CC disease, infections caused by bacteria, viruses and fungi and ocular
CC disorders e.g. corneal infection. The polypeptides can also be used to
CC aid wound healing and epithelial cell proliferation, to prevent skin
CC aging due to sunburn, to maintain organs before transplantation, for
CC supporting cell culture of primary tissues, to regenerate tissues and in
CC chemotaxis. The polypeptides can also be used as a food additive or
CC preservative to increase or decrease storage capabilities. AAF22364 to
CC AAF22372 and AAB63133 represent sequences used in the exemplification of
CC the present invention.
XX
SQ Sequence 1953 BP; 428 A; 540 C; 524 G; 458 T; 3 other;

Query Match 37.3%; Score 508.6; DB 21; Length 1953;
Best Local Similarity 99.2%; Pred. No. 1.5e-110;
Matches 511; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

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Qy    908 ggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccgggcgtaca 967
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Db    377 ggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccgggcgtaca 436

Qy    968 tgatcctcctccccttctcggagacgtttttctacctcagctcggtcatcaacccgctcc 1027
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Db    437 tgatcctcctccccttctcggagacgtttttctacctcagctcggtcatcaacccgctcc 496

Qy   1028 tgtacacggtgtcctcgcagcagtttcggcgggtgttcgtgcaggtgctgtgctgccgcc 1087
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Db    497 tgtacacggtgtcctcgcagcagtttcggcgggtgttcgtgcaggtgctgtgctgccgcc 556

Qy   1088 tgtcgctgcagcacgccaaccacgagaagcgcctgcgcgtacatgcgcactccaccaccg 1147
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    557 tgtcgctgcagcacgccaaccacgagaagcgcctgcgcgtacatgcgcactccaccaccg 616

Qy   1148 acagcgcccgctttgtgcagcgcccgttgctcttcgcgtcccggcgccagtcctctgcaa 1207
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Qy   1208 ggagaactgagaagattttcttaagcacttttcagagcgaggccgagccccagtctaagt 1267
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Db    677 ggagaactgagaagattttcttaagcacttttcagagcgaggccgagccccagtctaagt 736

Qy   1268 cccagtcattgagtctcgagtcactagagcccaactcaggcgcgaaaccagccaattctg 1327
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Db    737 cccagtcattgagtctcgagtcactagagcccaactcaggcgcgaaaccagccaattctg 796

Qy   1328 ctgcagagaatggttttcaggagcatgaagtttga 1362
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Db    797 ctgcagagaatggttttcaggagcatgaagtttga 831
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RESULT 2
AAF64188
ID AAF64188 standard; cDNA; 1956 BP.
XX
AC AAF64188;
XX
DT 06-APR-2001 (first entry)
XX
DE Human secreted protein gene 13 SEQ ID NO:23.
XX
KW Human; secreted protein; immunosuppressive; antiarthritic; antirheumatic;
KW antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective;
KW nootropic; neuroprotective; antibacterial; virucide; fungicide;
KW opthalmalogical; vulnerary; autoimmune disease; cardiovascular disorder;
KW hyperproliferative disorders; cerebrovascular disorder; wound healing;
KW nervous system disorder; ocular disorder; skin ageing; chemotaxis;
KW food additive; ss.
XX
OS Homo sapiens.
XX
PN WO200077026-A1.
XX
PD 21-DEC-2000.
XX
PF 01-JUN-2000; 2000WO-US14973.
XX
PR 11-JUN-1999; 99US-0138630.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
PA (ROSE/) ROSEN C A.
XX
PI Rosen CA, Ruben SM, Komatsoulis GA;
XX
DR WPI; 2001-071258/08.
DR P-PSDB; AAB75518.
XX
PT Nucleic acid molecules encoding human secreted proteins, used in
PT preventing, treating or ameliorating a disorder, e.g. Alzheimer's and
PT Parkinson's diseases and cancers -
XX
PS Claim 1; Page 443-444; 542pp; English.
XX
CC Human secreted proteins AAB75506 - AAB75554 are encoded by polynucleotide
CC sequences AAF64176 - AAF64224. The specification includes amino acid
CC sequences AAB75555 - AAB75606 which represent fragments of the human
CC secreted proteins, and protein sequences with which they share homology.
CC The proteins and polynucleotides, their agonists and antagonists have
CC activities dependent on the tissues and cells in which they are
CC expressed, examples of these activities include, immunosuppressive;
CC antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant;
CC vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial;
CC virucide; fungicide; opthalmalogical; and vulnerary. The proteins,
CC polynucleotides, agonists and antagonists can be used to treat or detect
CC or diagnose various diseases and disorders including, autoimmune
CC diseases e.g. rheumatoid arthritis, hyperproliferative disorders
CC e.g. neoplasms of the breast or liver, cardiovascular disorders
CC e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischaemia,
CC angiogenesis, nervous system disorders e.g. Alzheimer's disease,
CC infections caused by bacteria, viruses and fungi and ocular disorders
CC e.g. corneal infection. The polypeptides can also be used to aid wound
CC healing and epithelial cell proliferation, to prevent skin ageing due to
CC sunburn, to maintain organs before transplantation, for supporting cell
CC culture of primary tissues, to regenerate tissues and in chemotaxis. The
CC polypeptides can also be used as a food additive or preservative to
CC increase or decrease storage capabilities. Included in the invention are
CC polynucleotide sequences AAF64167 - AAF64175 and peptide AAB75505 which

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CC   are used in the isolation, identification and characterisation of the
CC   proteins of the invention.
XX
SQ   Sequence 1956 BP; 430 A; 543 C; 524 G; 456 T; 3 other;


  Query Match             37.3%;  Score 508.6;  DB 22;  Length 1956;
  Best Local Similarity   99.2%;  Pred. No. 1.5e-110;
  Matches  511;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

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Qy     908 ggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccgggcgtaca 967
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Qy     968 tgatcctcctccccttctcggagacgtttttctacctcagctcggtcatcaacccgctcc 1027
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Db     437 tgatcctcctccccttctcggagacgtttttctacctcagctcggtcatcaacccgctcc 496

Qy    1028 tgtacacggtgtcctcgcagcagtttcggcgggtgttcgtgcaggtgctgtgctgccgcc 1087
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Db     497 tgtacacggtgtcctcgcagcagtttcggcgggtgttcgtgcaggtgctgtgctgccgcc 556

Qy    1088 tgtcgctgcagcacgccaaccacgagaagcgcctgcgcgtacatgcgcactccaccaccg 1147
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Qy    1148 acagcgcccgctttgtgcagcgcccgttgctcttcgcgtcccggcgccagtcctctgcaa 1207
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Db     617 acagcgcccgctttgtgcagcgcccgttgctcttcgcgtcccggcgccagtcctctgcaa 676

Qy    1208 ggagaactgagaagattttcttaagcacttttcagagcgaggccgagccccagtctaagt 1267
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Qy    1268 cccagtcattgagtctcgagtcactagagcccaactcaggcgcgaaaccagccaattctg 1327
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Db     737 cccagtcattgagtctcgagtcactagagcccaactcaggcgcgaaaccagccaattctg 796

Qy    1328 ctgcagagaatggttttcaggagcatgaagtttga 1362
           ||||||||||||||||||||||||||||||||||
Db     797 ctgcagagaatggttttcaggagcatgaagtttga 831


RESULT   3
AA[redacted]45/c
ID   AAF93845 standard; cDNA; 1890 BP.
XX
AC   AAF93845;
XX
DT   23-MAY-2001  (first entry)
XX
DE   Human cDNA encoding a membrane or secretory protein clone PSEC0181.
XX
KW   Human; secretory protein; membrane protein; vaccine; gene therapy;
KW   rheumatoid arthritis; diabetes; ss.
XX
OS   Homo sapiens.
XX
PN   EP1067182-A2.
XX
PD   10-JAN-2001.
XX
PF   07-JUL-2000; 2000EP-0114090.
XX
PR   08-JUL-1999;   99JP-0194179.
PR   11-JAN-2000; 2000JP-0118775.
PR   02-MAY-2000; 2000JP-0183766.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T, Isogai T, Nishikawa T, Kawai Y, Sugiyama T, Hayashi K;
XX
DR   WPI; 2001-093989/11.
DR   P-PSDB; AAB88418.
XX
PT   Nucleic acids encoding secretory proteins/membrane proteins, useful in
PT   gene therapy or as candidate target molecules in drug development -
XX
PS   Claim 1; SEQ ID 203; 609pp + CD ROM; English.
XX
CC   This invention relates to nucleic acid sequences AAF93744 - AAF93916
CC   which encode human secretory or membrane proteins represented by
CC   AAB88317 - AAB88419. Included in the invention are primers
CC   AAF93917 - AAF94295 and AAF62232 - AAF62235 which are used to isolate the
CC   cDNA sequences of the invention. The invention also includes methods for
CC   the production of antibodies directed against the proteins, and cDNA
CC   sequences, which can be used in vaccines. The polynucleotide sequences
CC   can be used in gene therapy. The polynucleotide sequences and the
CC   proteins they encode may be used in the prevention, treatment and
CC   diagnosis of diseases associated with inappropriate secretory
CC   protein/membrane protein expression. The nucleic acids and complementary
CC   sequences may also be used as DNA probes in diagnostic assays
CC   (e.g. polymerase chain reactions (PCR)) to detect and quantitate the
CC   presence of similar nucleic acid sequences in samples. They may also be
CC   used to study the expression and function of secretory proteins/membrane
CC   polypeptides and their role in metabolism. The polypeptides may be used
CC   as antigens in the production of antibodies against them and in assays to
CC   identify modulators (agonists and antagonists) of expression and
CC   activity. The antibodies and antagonists may also be used as therapeutic
CC   agents to down regulate expression and activity. The antibodies may also
CC   be used as diagnostic agents for detecting the presence of the
CC   polypeptides in samples (e.g. by enzyme linked immunosorbant assay
CC   (ELISA). Examples of diseases which may be treated include rheumatoid
CC   arthritis and diabetes.
XX
SQ   Sequence 1890 BP; 419 A; 528 C; 533 G; 410 T; 0 other;


  Query Match             36.5%;  Score 497.6;  DB 22;  Length 1890;
  Best Local Similarity   99.0%;  Pred. No. 5.8e-108;
  Matches  511;  Conservative    0;  Mismatches    4;  Indels    1;  Gaps    1;

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           ||| ||   ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1651 TCTGCCCAGGGCTGATTGTTGTGACATTGGCCGTATGCTGGATGCCCAACCAGATTCGGA 1592

Qy     908 ggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccgggcgtaca 967
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1591 GGATCATGGCTGCGGCCAAACCCAAGCACGACTGGACGAGGTCCTACTTCCGGGCGTACA 1532

Qy     968 tgatcctcctccccttctcggagacgtttttctacctcagctcggtcatcaacccgctcc 1027
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1531 TGATCCTCCTCCCCTTCTCGGAGACGTTTTTCTACCTCAGCTCGGTCATCAACCCGCTCC 1472

Qy    1028 tgtacacggtgtcctcgcagcagtttcggcgggtgttcgtgcaggtgctgtgctgccgcc 1087
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1471 TGTACACGGTGTCCTCGCAGCAGTTTCGGCGGGTGTTCGTGCAGGTGCTGTGCTGCCGCC 1412

Qy    1088 tgtcgctgcagcacgccaaccacgagaagcgcctgcgcgtacatgcgcactccaccaccg 1147
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1411 TGTCGCTGCAGCACGCCAACCACGAGAAGCGCCTGCGCGTACATGCGCACTCCACCACCG 1352

Qy    1148 acagcgcccgctttgtgcagcgcccgttgctcttcgcgtcccggcgccagtcctctgcaa 1207
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Qy    1208 -ggagaactgagaagattttcttaagcacttttcagagcgaggccgagccccagtctaag 1266
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1291 GGGAGAACTGAGAAGATTTTCTTAAGCACTTTTCAGAGCGAGGCCGAGCCCCAGTCTAAG 1232

Qy    1267 tcccagtcattgagtctcgagtcactagagcccaactcaggcgcgaaaccagccaattct 1326
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Db   1231 TCCCAGTCATTGAGTCTCGAGTCACTAGAGCCCAACTCAGGCGCGAAACCAGCCAATTCT 1172

Qy   1327 gctgcagagaatggttttcaggagcatgaagtttga 1362
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Db   1171 GCTGCAGAGAATGGTTTTCAGGAGCATGAAGTTTGA 1136
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RESULT 4
AAF94186
ID AAF94186 standard; DNA; 587 BP.
XX
AC AAF94186;
XX
DT 23-MAY-2001 (first entry)
XX
DE Primer specific for DNA encoding secretory/membrane protein SEQ ID 620.
XX
KW Human; secretory protein; membrane protein; vaccine; gene therapy;
KW rheumatoid arthritis; diabetes; PCR primer; ss.
XX
OS Synthetic.
XX
PN EP1067182-A2.
XX
PD 10-JAN-2001.
XX
PF 07-JUL-2000; 2000EP-0114090.
XX
PR 08-JUL-1999; 99JP-0194179.
PR 11-JAN-2000; 2000JP-0118775.
PR 02-MAY-2000; 2000JP-0183766.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Kawai Y, Sugiyama T, Hayashi K;
XX
DR WPI; 2001-093989/11.
XX
PT Nucleic acids encoding secretory proteins/membrane proteins, useful in
PT gene therapy or as candidate target molecules in drug development -
XX
PS Claim 5; SEQ ID 620; 609pp + CD ROM; English.
XX
CC This invention relates to nucleic acid sequences AAF93744 - AAF93916
CC which encode human secretory or membrane proteins represented by
CC AAB88317 - AAB88419. Included in the invention are primers
CC AAF93917 - AAF94295 and AAF62232 - AAF62235 which are used to isolate the
CC cDNA sequences of the invention. The invention also includes methods for
CC the production of antibodies directed against the proteins, and cDNA
CC sequences, which can be used in vaccines. The polynucleotide sequences
CC can be used in gene therapy. The polynucleotide sequences and the
CC proteins they encode may be used in the prevention, treatment and
CC diagnosis of diseases associated with inappropriate secretory
CC protein/membrane protein expression. The nucleic acids and complementary
CC sequences may also be used as DNA probes in diagnostic assays
CC (e.g. polymerase chain reactions (PCR)) to detect and quantitate the
CC presence of similar nucleic acid sequences in samples. They may also be
CC used to study the expression and function of secretory proteins/membrane
CC polypeptides and their role in metabolism. The polypeptides may be used
CC as antigens in the production of antibodies against them and in assays to
CC identify modulators (agonists and antagonists) of expression and
CC activity. The antibodies and antagonists may also be used as therapeutic
CC agents to down regulate expression and activity. The antibodies may also
CC be used as diagnostic agents for detecting the presence of the
CC polypeptides in samples (e.g. by enzyme linked immunosorbant assay
CC (ELISA). Examples of diseases which may be treated include rheumatoid
CC arthritis and diabetes.
XX
SQ Sequence 587 BP; 117 A; 162 C; 140 G; 162 T; 6 other;

Query Match 17.4%; Score 236.6; DB 22; Length 587;
Best Local Similarity 85.8%; Pred. No. 1.4e-46;
Matches 296; Conservative 0; Mismatches 43; Indels 6; Gaps 3;

```
Qy    848 tcttcctgaggctgattgttgtgacattggccgtatgctggatgcccaaccagattcgga 907
          ||| ||   ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    240 tctgcccagggctgattgttgtgacattggccgtatgctggatgcccaaccagattcgga 299

Qy    908 ggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccgggcgtaca 967
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    300 ggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccgggcgtaca 359

Qy    968 tgatcctcctccccttctcggagacgtttttctacctcagctcggtcatcaacccgctcc 1027
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| |
Db    360 tgatcctcctccccttctcggagacgtttttctacctcagctcggtcatcaacccgcttc 419

Qy   1028 tgtacacggtgtcctcgcagcagtttcggcgggtgttcgtgcaggtgctgtgctgccgcc 1087
          |||||||||||||||||| ||  |||||||||| ||||||| |||| ||  |  | |
Db    420 tgtacacggtgtcctcgcaacaanttcggcgggtggtcgtgcangtgc--tggctgccgc 477

Qy   1088 tgtcgctgcagcacgccaaccacgagaagcgcctgcgcgtacatgcgcactccaccaccg 1147
          |||||||  | |||||||||||||||||||||||| ||| ||||||||||||     |
Db    478 tgtcgcttgaacacgccaaccacgagaagcgcctgngcg-acatgcgcactcacaacc-- 534

Qy   1148 acagcgcccgctttgtgcagcgcccgttgctcttcgcgtcccggc 1192
            | | ||  |||| ||| |||||||| | | ||     |  |||
Db    535 -gaagggcccgtttgggcaacgcccgtggtttttgngtccggggc 578
```

RESULT 5
AAT33127
ID AAT33127 standard; cDNA; 1254 BP.
XX
AC AAT33127;
XX
DT 07-NOV-1996 (first entry)
XX
DE Human neurotensin receptor encoding sequence.
XX
KW neurotensin receptor; antagonist; agonist; screening; treatment; ulcer;
KW Parkinson's disease; depression; dementia; retrograde oseophagitis; ds.
XX
OS Homo sapiens.
XX
PN JP08143597-A.
XX
PD 04-JUN-1996.
XX
PF 24-NOV-1994; 94JP-0289882.
XX
PR 24-NOV-1994; 94JP-0289882.
XX
PA (TAKE) TAKEDA CHEM IND LTD.
XX
DR WPI; 1996-318958/32.
DR P-PSDB; AAR98562.
XX
PT DNA encoding human neurotensin receptor protein - useful for
PT screening for (ant)agonists used to treat, e.g. Parkinson's disease,
PT depression, dementia, retrograde oesophagitis, ulcers, etc.
XX
PS Claim 4; Page 22; 26pp; Japanese.
XX
CC The present sequence encodes a human neurotensin receptor protein
CC (AAR98562). The DNA and protein are useful for screening for
CC (ant)agonists used to treat Parkinson's disease, depression, dementia,
CC retrograde oseophagitis, ulcers, etc..
XX
SQ Sequence 1254 BP; 215 A; 459 C; 359 G; 221 T; 0 other;

Query Match 12.1%; Score 165.2; DB 17; Length 1254;
Best Local Similarity 49.9%; Pred. No. 1.2e-29;
Matches 505; Conservative 0; Mismatches 468; Indels 39; Gaps 2;

```
Qy    106 gtgtacctgatcatcttcgtgatgggccttctggggaacagcgccaccattcgggtcacc 165
          ||||||||||    ||||||||| |||||    |||| ||||  |  ||
Db    205 gtgtacctggcgctcttcgtggtgggcacggtgggcaacacggtgacggcgttcacgctg 264

Qy    166 caggtgctgcagaagaaaggatacttgcagaaggaggtgacagaccacatggtgagtttg 225
            |  |  | ||  |         | ||||||    ||||    |||||  |||  ||  ||
Db    265 gcgcggaagaagtcgctgcagagcctgcagagcacggtgcattaccacctgggcagcctg 324

Qy    226 gcttgctcggacatcttggtgttcctcatcggcatgcccatggagttctacagcatcatc 285
          ||    || |||  |   |     | ||  | | |||||||  |||||  | ||||  | |||||
Db    325 gcgctgtccgacctgctcaccctgctgctggccatgcccgtggagctgtacaacttcatc 384

Qy    286 tggaatcccctgaccacgtccagctacaccctgtcctgcaagctgcacactttcctcttc 345
          |||   | ||   ||  | ||  |  |  |     ||||       ||   |||||   |
Db    385 tgggtgcaccacccctgggccttcggcgacgccggctgccgcggctactacttcctgcgc 444

Qy    346 gaggcctgcagctacgctacgctgctgcacgtgctgacactcagctttgagcgctacatc 405
          ||  |||||||  |||||| |||    ||  |||||   |  || ||  | |||||||||  |
Db    445 gacgcctgcacctacgccacggccctcaacgtggccagcctgagtgtggagcgctacctg 504

Qy    406 gccatctgtcaccccttcaggtacaaggctgtgtcgggaccttgccaggtgaagctgctg 465
          ||||||||  ||||||||||  |  ||||  |   |   |   |||     |||  | |
Db    505 gccatctgccacccccttcaaggccaagaccctcatgtcccgaagccgcaccaagaagttc 564

Qy    466 attggcttcgtctgggtcacctccgccctggtggcactgcccttgctgtttgccatgggt 525
          ||  ||  | |||||  ||  ||||  ||||||  ||||  ||||  |||||||  |||||||
Db    565 atcagcgccatctggctcgcctcggccctgctggcggtgcctatgctgttcaccatgggc 624

Qy    526 actgagtacccccctggtgaacgtgcccagccaccggggtctcacttgcaaccgctccagc 585
            ||·|||  |   |   |||  |    |  | | ||  ||    ||||  ||  | |||  |
Db    625 gagcagaaccgcagcgccgacggccagcacgccggcggcctggtgtgcacccccaccatc 684

Qy    586 acccgccaccacgagcagcccgagacctccaatatgtccatctgtaccaacctctccagc 645
            |   |  ||                                          |||  ||  ||
Db    685 cacactgccaccg----------------------------------tcaaggtcgtcata 711

Qy    646 cgctggaccgtgttccagtccagcatcttcggcgccttcgtggtctacctcgtggtcctg 705
          |    | |   |||  ||||  |||  |||   |    | ||  |||   || ||  |
Db    712 caggtcaacaccttcatgtccttcatattccccatggtggtcatctcggtcctgaacacc 771

Qy    706 ctctccgtagccttcatgtgctggaacatgatgcaggtgctcatgaaaagccagaagggc 765
          ||  ||    |    ||  |   |   |    ||||  |  |  | |  ||||   | ||
Db    772 atcatcgccaacaagctgaccgtcatggtacgccaggcggccgagcagggccaagtgtgc 831

Qy    766 tcgctggccgggggcacgcggcctccgcagctgaggaagtccgagagcgaagagagcagg 825
          || | |  || |        ||          | || | | ||         |  ||
Db    832 acggtcgggggcg------agcacagcacattcagcatggccatcgagcctggcagggtc 885

Qy    826 accgccaggaggcagaccatcatcttcctgaggctgattgttgtgacattggccgtatgc 885
          |||  | ||||   | |   | ||||  |     | ||  |  | || |  || |||
Db    886 caggccctgcggcacggcgtgcgcgtcctacgtgcagtggtcatcgcctttgtggtctgc 945

Qy    886 tggatgcccaaccagattcggaggatcatggctgcggccaaacccaagcacgactggacg 945
          ||| ||||| ||||  | ||| |  |||||        ||   |  |  |  | ||||||
Db    946 tggctgccctaccacgtgcggcgcctcatgttctgctacatctcggatgagcagtggact 1005

Qy    946 aggtcctacttccgggcgtacatgatcctcctcccctctcggagacgtttttctacctc 1005
            || |  ||        |||     | ||  |    |  |  |  |  | ||||||  ||
Db   1006 ccgttcctctatgacttctaccactacttctacatggtgaccaacgcactcttctacgtc 1065

Qy   1006 agctcggtcatcaacccgctcctgtacacggtgtcctcgcagcagtttcggcgggtgttc 1065
          |||||   |||||||||  |||||||||    |   |||     | || || |   | |||
Db   1066 agctccaccatcaaccccatcctgtacaacctcgtctctgccaacttccgccacatcttc 1125

Qy   1066 gtgcaggtgctgtgctgccgcctgtcgctgcagcacgccaaccacgagaagc 1117
            ||      |||  ||||| |    || ||  ||    ||      ||| ||
Db   1126 ctggccacactggcctgcctctgcccggtgtggcggcgcaggaggaagaggc 1177
```

RESULT 6
AAH50766
ID AAH50766 standard; cDNA; 444 BP.
XX
AC AAH50766;
XX
DT 23-AUG-2001 (first entry)
XX
DE Human tumour associated cDNA #95.
XX
KW Human; cancer specific gene expression; gene therapy;
KW age related differential expression; ss.
XX
OS Homo sapiens.
XX
PN WO200136685-A2.
XX
PD 25-MAY-2001.
XX
PF 17-NOV-2000; 2000WO-US31809.
XX
PR 17-NOV-1999; 99US-0166056.
PR 17-NOV-1999; 99US-0166106.
XX
PA (NYXI-) NYXIS NEURO THERAPIES INC.
XX
PI Kroes RA, Moskal JR, Yamamoto H;
XX
DR WPI; 2001-355647/37.
XX
PT Novel nucleic acid molecules differentially expressed in brain cancers,
PT useful for ascertaining propensity of cell for malignant phenotype or
PT ascertaining suitability of anti-neoplastic drug candidate -
XX
PS Claim 28; Page 50; 82pp; English.
XX
CC The present invention provides the sequences of 184 cDNA fragments which
CC are differentially expressed in cancer cell depending on the age of the
CC patient. They can be used to diagnose and identify treatments for
CC cancers, particularly brain cancers such as haemangioblastoma, teratoma,
CC haemangioma, glioblastoma, schwannoma, osteoma and pinealoma. The
CC present sequence is a cancer-associated cDNA of the invention.
XX
SQ Sequence 444 BP; 95 A; 113 C; 94 G; 142 T; 0 other;

Query Match 11.6%; Score 158.6; DB 22; Length 444;
Best Local Similarity 97.6%; Pred. No. 3.2e-28;
Matches 161; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```
Qy    848 tcttcctgaggctgattgttgtgacattggccgtatgctggatgcccaaccagattcgga 907
          |||  ||  ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    267 tctgcccagggctgattgttgtgacattggccgtatgctggatgcccaaccagattcgga 326

Qy    908 ggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccgggcgtaca 967
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    327 ggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccgggcgtaca 386

Qy    968 tgatcctcctccccttctcggagacgtttttctacctcagctcgg 1012
          ||||||||||||||||||||||||||||||||||||||||||||
Db    387 tgatcctcctccccttctcggagacgtttttctacctcagctcgg 431
```

RESULT 7
AAF85448
ID AAF85448 standard; cDNA; 1203 BP.
XX
AC AAF85448;
XX
DT 23-JUL-2001 (first entry)
XX
DE Nucleotide sequence of a rabbit motilin receptor polypeptide.
XX
KW Motilin receptor; gastrointestinal disease; gastric motility disorder;
KW gastroparesis; irritable bowel syndrome; diarrhoea; ss.
XX
OS Oryctolagus cuniculus.

```
XX
FH   Key             Location/Qualifiers
FT   CDS             1..1203
FT                   /*tag= a
FT                   /note= "motilin receptor"
XX
PN   WO200132710-A1.
XX
PD   10-MAY-2001.
XX
PF   25-OCT-2000; 2000WO-US29426.
XX
PR   29-OCT-1999;   99US-0162264.
XX
PA   (MERI ) MERCK & CO INC.
XX
PI   Tan C,  McKee K;
XX
DR   WPI; 2001-343479/36.
DR   [redacted]-PSDB; AAB68477.
XX
PT   Novel polypeptides related to dog and rabbit motilin receptor
PT   polypeptide, comprising unique regions from dog and motilin receptor
PT   amino acid sequence, useful for identifying compounds for treating
PT   diarrhoea in humans -
XX
PS   Claim 18; Page 18-19; 42pp; English.
XX
CC   The present sequence encodes a rabbit motilin receptor polypeptide.
CC   The specification describes an unique sequence present in exon 1 of
CC   the dog motilin receptor, which is not present in human or Sphaeroides
CC   nephelus 75E7 motilin receptor sequences. The unique nucleic acid
CC   sequence is useful for measuring the ability of a compound to affect
CC   motilin receptor activity. Motilin receptor polynucleotides and
CC   polypeptides are used to identify therapeutic compounds which are
CC   useful for treating gastrointestinal diseases and disorders such as
CC   gastric motility disorders, gastroparesis, irritable bowel syndrome,
CC   and diarrhoea.
XX
SQ   Sequence 1203 BP; 154 A; 423 C; 403 G; 223 T; 0 other;

  Query Match             7.5%;  Score 102.6;  DB 22;  Length 1203;
  Best Local Similarity   47.6%;  Pred. No. 6.9e-15;
  Matches  408;  Conservative    0;  Mismatches  434;  Indels   15;  Gaps    3;

Qy    240 cttggtgttcctcatcggcatgcccatggagttctacagcatcatctggaatcccctgac 299
          | || |  ||||  ||||  ||||| | ||  | ||| |   | | |||    |   | |
Db    [redacted]252 cctgctcatcctgctcgggctgcccttcgacctgtaccg---cctgtggcgctcgaggcc 308

Qy    300 cacgtccagctacaccctgtcctgcaagctgcacactttcctcttcgaggcctgcagcta 359
          |  |     |      |||  ||||   |||      | | |   ||||| ||||| |||
Db    309 ctgggtgttcggacagctgctctgccgcctgtcgctgtacgtgggcgagggctgcaccta 368

Qy    360 cgctacgctgctgcacgtgctgacactcagctttgagcgctacatcgccatctgtcaccc 419
          |||  |||||||||| ||  | | |||||| | |||||||| | |||||||| | |||
Db    369 cgcctcgctgctgcacatgacggcgctcagcgtggagcgctacctggccatctgccgccc 428

Qy    420 cttcaggtacaaggctgtgtcgggaccttgccaggtgaagctgctgattggcttcgtctg 479
            |  |   |  |  ||      |   ||| |||      ||| || | |    ||||
Db    429 gctgcgtgcccgcgtcttggtcacccgccgccgggtccgcgcgctcatcgccgcgctctg 488

Qy    480 ggtcacctccgccctggtggcactgcccttgctgtttgccatgggtactgagtacccccct 539
          || |    |    ||  |||  ||||||  | |||    ||||    ||| |   ||
Db    489 ggccgtggcgctgctttcggccgggccccttcttctttctggtgggcgtcgagcaggaccc 548

Qy    540 ggtgaacgtgcccagccaccggggtctcacttgcaaccgctccagcacccgccaccacga 599
          | |  | | |  ||      |  | |      |      | ||      | ||
Db    549 cgcggtcttcgcggccccggaccgcaacggtactgtgccgctggacccctcgtcgcccgc 608

Qy    600 gcagcccgagacctccaatatgtccatctgtaccaacctctccagccgctggaccgtgtt 659
          | | |    | |      | ||           |    |      | |   || ||
Db    609 cccggcgtccccgccgtcggggcccggagcggaggccgcggctctgttcagccgcgagtg 668

Qy    660 ccagtccagcatcttcggcgccttcgtggtctacctcgtggtcctgctctccgtagcctt 719
          || | | |||  |           | || |   | || || |   | |  ||   ||||
Db    669 ccggccgagccgcgcgcagctgggcttgctgcgcgtcatgctgtgggttaccaccgccta 728

Qy    720 catgtgctggaacatgatgcaggtgctcatgaaaagccagaagggctcgctggccggggg 779
          | | | |  |  | |  |      |   |||      |  |      | ||| |     | |
Db    729 ctttttcctgcccttcctctgcctcagcatcctctacgggctcatcgcgcgcggcagctgtg 788

Qy    780 cacgcggcctccgcagctgaggaagtccgagagcgaagagagcaggaccgccaggaggca 839
            | | |      | |||| |     | | |  |   |   |   ||  | |    ||||
Db    789 gcggggtcggggcccgctgcgaggcccggcggccacgggtcgggagaggggccaccggca 848

Qy    840 gaccatcatcttcctgaggctgattgttgtgacattggccgtatgctggatgcccaacca 899
          |||| ||  | |||||  | || | ||| || | ||    || |||||| ||||   |||
Db    849 gaccgtccgcgtcctgctggtggtggttctggcctttatagtgtgctggctgcctttcca 908

Qy    900 gattcggaggatcatggctgcggccaaacccaagcacgactggacgaggtcctacttccg 959
            || | |||||||||        || |  ||  || |||| |  || |   ||||||
Db    909 cgttggcaggatcattta------cataaacacccaagactcgcggatgatgtacttctc 962

Qy    960 ggcgtacatgatcctcctccccttctcggagacgtttttctacctcagctcggtcatcaa 1019
            |||| | | | |  || |  |      |  | ||||||||||| ||  ||  ||||||
Db    963 ccagtactttaacattgtcgcgct------gcagcttttctacctgagtgcgtccatcaa 1016

Qy    1020 cccgctcctgtacacggtgtcctcgcagcagtttcggcgggtgttcgtgcaggtgctgtg 1079
           |||  |||| ||||   |   |||  || |||   |   ||    |          ||||| |
Db    1017 cccaatcctctacaacctcatctccaagaagtacagagcggctgcccgcagactgctgcg 1076

Qy    1080 ctgccgcctgtcgctgc 1096
           |    |||   ||  ||
Db    1077 cgaaagccgagcggggc 1093


RESULT   8
AAZ49491
ID   AAZ49491 standard; cDNA; 1551 BP.
XX
AC   AAZ49491;
XX
DT   04-APR-2000  (first entry)
XX
DE   Human NT2LP protein encoding b form splice variant cDNA.
XX
KW   Human; NT2LP; G-protein coupled receptor; neurotensin-2 receptor; NT2;
KW   drug screening; diagnosis; allelic screening; pharmacogenetic testing;
KW   forensic biology; chromosome mapping; tissue typing; primer; probe; pain;
KW   analgesic; splice variant; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             57..1290
FT                   /*tag= a
FT                   /product= "NT2LP protein"
XX
PN   WO9958641-A2.
XX
PD   18-NOV-1999.
XX
PF   11-MAY-1999;   99WO-US10311.
XX
PR   11-MAY-1998;   98US-0076313.
PR   30-DEC-1998;   98US-0223492.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Curtis R,  Glucksmann MA;
XX
DR   WPI; 2000-126365/11.
DR   P-PSDB; AAY44580.
XX
PT   New G-protein coupled receptor NT2LP used to treat diseases,
```

```
PT   pathologies or disorders such as pain -
XX
PS   Claim 7; Fig 2; 102pp; English.
XX
CC   The present cDNA sequence is the b form splice variant encoding human
CC   G-protein coupled receptor, NT2LP which is expressed in brain and
CC   ovaries. It is derived from human brain cDNA library. NT2LP
CC   participates in signalling pathways in cells that express
CC   this protein and shows homolgy to neurotensin-2 (NT2) receptors. This
CC   sequence can be used for drug screening, diagnosis, allelic screening,
CC   pharmacogenetic testing, forensic biology, chromosome mapping, tissue
CC   typing, detection of genetic alterations in NT2LP gene and as source of
CC   primers and probes. It has analgesic activity and can be used to treat
CC   disorders characterised by aberrant NT2LP expression or activity e.g.
CC   pain.
XX
SQ   Sequence 1551 BP; 271 A; 522 C; 462 G; 296 T; 0 other;

  Query Match             7.2%;  Score 97.6;  DB 21;  Length 1551;
  Best Local Similarity   49.2%;  Pred. No. 1.1e-13;
  Matches  256;  Conservative    0;  Mismatches  264;  Indels    0;  Gaps    0;

Qy      52 agtcatgtccccgagtttgaggtggccacctggatcaaaatcacccttattctggtgtac 111
           || |  | | ||  | | |  |||| |||  |  ||     ||   |  |  |
Db     109 agcctggacgcccggctgggcgtggacactcgcctctgggccaaggtgctgttcaccgcg 168

Qy     112 ctgatcatcttcgtgatgggccttctggggaacagcgccaccattcgggtcacccaggtg 171
           ||   |    || |   ||  ||    | |    ||    |  |    ||   |  ||||
Db     169 ctctacgcactcatctgggcgctgggcgcggcgggcaatgcgctgtccgtgcacgtggtg 228

Qy     172 ctgcagaagaaaggatacttgcagaaggaggtgacagaccacatggtgagtttggcttgc 231
           ||| ||  |   |           |  |    ||    ||||| || | ||  ||||   |
Db     229 ctgaaggcgcgggccgggcgcgcggggcgcctgcgccaccacgtgctcagcctggcgctc 288

Qy     232 tcggacatcttggtgttcctcatcggcatgcccatggagttctacagcatcatctggaat 291
           ||| | |  || || | ||  |||||  |||| |||||  |||||||| || | |||
Db     289 gcgggcctgctgctgctgctggtcggcgtgccggtggagctctacagcttcgtgtggttc 348

Qy     292 cccctgaccacgtccagctacaccctgtcctgcaagctgcacactttcctcttcgaggcc 351
           | |    ||  |  |  |  |  |||| ||||       ||   ||| |   ||||
Db     349 cactaccctgggtcttcggcgacctgggctgccgcggctactacttcgtgcacgagctg 408

Qy     352 tgcagctacgctacgctgctgcacgtgctgacactcagctttgagcgctacatcgccatc 411
           |||  |||||| ||| |||||  ||||      || |||   |||||| | | ||| |
Db     409 tgcgcctacgccacggtgctgagcgtggcaggcctgagcgccgagcgctgcctagccgtg 468

Qy     412 tgtcacccctcaggtacaaggctgtgtcgggaccttgccaggtgaagctgctgattggc 471
           || || ||| |  |   |       ||  |   ||  ||| |     |  |||| | |
Db     469 tgccagcccctgcgtgcccgcagcctgctgacgccacgccggacccggtggctggtggcg 528

Qy     472 ttcgtctgggtcacctccgccctggtggcactgcccttgctgtttgccatgggtactgag 531
           ||   |||| | ||||   |    | || ||||||  ||    |   ||||||     ||
Db     529 ctctcgtgggccgcctcgctcggcctcgcccctgcccatggccgtcatcatggggcagaag 588

Qy     532 tacccccctggtgaacgtgcccagccaccggggtctcactt 571
           ||   || | ||  | |  | |  | | ||  | | | |
Db     589 cacgaactcgagacggcggacggggagccggagcccgcct 628


RESULT   9
AAV07655
ID   AAV07655 standard; cDNA; 1575 BP.
XX
AC   AAV07655;
XX
DT   04-DEC-1998  (first entry)
XX
DE   cDNA encoding a human type 2 neurotensin receptor protein.
XX
KW   Human; neurotensin type 2 receptor; hNT-R2; treatment; hormonal;
KW   neurological disorder; neurotensin; thermo-regulation disorder; stress;
KW   muscular contraction disorder; schizophrenia; analgesic; antipyretic; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             37..1269
FT                   /*tag=  a
FT                   /product= neurotensin type 2 receptor
XX
PN   FR2760750-A1.
XX
PD   18-SEP-1998.
XX
PF   17-MAR-1997;   97FR-0003204.
XX
PR   17-MAR-1997;   97FR-0003204.
XX
PA   (SNFI ) SANOFI SA.
XX
PI   Caput D,  Chalon P,  Ferrara P,  Vita N;
XX
DR   WPI; 1998-508932/44.
DR   P-PSDB; AAW66103.
XX
PT   New human neurotensin type 2 receptor polypeptide - obtained by
PT   recombinant methods, used for treating hormonal or neurological
PT   disorders and in screening and diagnostic methods
XX
PS   Claim 3; Pages 34-36; 50pp; French.
XX
CC   The present sequence encodes a constituent polypeptide of human
CC   neurotensin type 2 receptor (hNT-R2). The protein is a membrane
CC   protein with 7 transmembrane domains. The products are used in
CC   medicaments for treating hormonal or neurological disorders
CC   involving natural hNT-R2 receptor and neurotensin. The medicaments
CC   are useful for treating thermo-regulation disorders, stress,
CC   muscular contraction disorders (especially in digestive tract smooth
CC   muscle), pain and (due to action on the dopaminergic system)
CC   neurological disorders such as schizophrenia, especially as analgesics
CC   and antipyretics.
XX
SQ   Sequence 1575 BP; 288 A; 519 C; 463 G; 305 T; 0 other;

  Query Match             7.2%;  Score 97.6;  DB 19;  Length 1575;
  Best Local Similarity   49.2%;  Pred. No. 1.1e-13;
  Matches  256;  Conservative    0;  Mismatches  264;  Indels    0;  Gaps    0;

Qy      52 agtcatgtccccgagtttgaggtggccacctggatcaaaatcacccttattctggtgtac 111
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Db      88 agcctggacgcccggctgggcgtggacactcgcctctgggccaaggtgctgttcaccgcg 147

Qy     112 ctgatcatcttcgtgatgggccttctggggaacagcgccaccattcgggtcacccaggtg 171
           ||   |    || |   ||  ||    | |    ||    |  |    ||   |  ||||
Db     148 ctctacgcactcatctgggcgctgggcgcggcgggcaatgcgctgtccgtgcacgtggtg 207

Qy     172 ctgcagaagaaaggatacttgcagaaggaggtgacagaccacatggtgagtttggcttgc 231
           ||| ||  |   |           |  |    ||    ||||| || | ||  ||||   |
Db     208 ctgaaggcgcgggccgggcgcgcggggcgcctgcgccaccacgtgctcagcctggcgctc 267

Qy     232 tcggacatcttggtgttcctcatcggcatgcccatggagttctacagcatcatctggaat 291
           ||| | |  || || | ||  |||||  |||| |||||  |||||||| || | |||
Db     268 gcgggcctgctgctgctgctggtcggcgtgccggtggagctctacagcttcgtgtggttc 327

Qy     292 cccctgaccacgtccagctacaccctgtcctgcaagctgcacactttcctcttcgaggcc 351
           | |    ||  |  |  |  |  |||| ||||       ||   ||| |   ||||
Db     328 cactaccctgggtcttcggcgacctgggctgccgcggctactacttcgtgcacgagctg 387

Qy     352 tgcagctacgctacgctgctgcacgtgctgacactcagctttgagcgctacatcgccatc 411
           |||  |||||| ||| |||||  ||||      || |||   |||||| | | ||| |
Db     388 tgcgcctacgccacggtgctgagcgtggcaggcctgagcgccgagcgctgcctagccgtg 447

Qy     412 tgtcacccctcaggtacaaggctgtgtcgggaccttgccaggtgaagctgctgattggc 471
           || || ||| |  |   |       ||  |   ||  ||| |     |  |||| | |
```

```
Db    448 tgccagcccctgcgtgcccgcagcctgctgacgccacgccggacccggtggctggtggcg 507

Qy    472 ttcgtctgggtcacctccgccctggtggcactgcccttgctgtttgccatgggtactgag 531
          ||   |||| | ||||   |    | || |||||| ||    |   ||||||     ||
Db    508 ctctcgtgggccgcctcgctcggcctcgccctgcccatggccgtcatcatggggcagaag 567

Qy    532 taccccctggtgaacgtgcccagccaccggggtctcactt 571
            ||   || | ||  | |  | |  | | ||  | | | |
Db    568 cacgaactcgagacggcggacggggagccggagcccgcct 607


RESULT 10
AAZ49492
ID   AAZ49492 standard; cDNA; 2850 BP.
XX
AC   AAZ49492;
XX
DT   04-APR-2000  (first entry)
XX
DE   Human NT2LP protein encoding c form splice variant cDNA.
XX
KW   Human; NT2LP; G-protein coupled receptor; neurotensin-2 receptor; NT2;
KW   drug screening; diagnosis; allelic screening; pharmacogenetic testing;
KW   forensic biology; chromosome mapping; tissue typing; primer; probe; pain;
KW   analgesic; splice variant; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             1260..2493
FT                   /*tag=  a
FT                   /product= "NT2LP protein"
XX
PN   WO9958641-A2.
XX
PD   18-NOV-1999.
XX
PF   11-MAY-1999;   99WO-US10311.
XX
PR   11-MAY-1998;   98US-0076313.
PR   30-DEC-1998;   98US-0223492.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Curtis R,  Glucksmann MA;
XX
DR   WPI; 2000-126365/11.
DR   P-PSDB; AAY44580.
XX
PT   New G-protein coupled receptor NT2LP used to treat diseases,
PT   pathologies or disorders such as pain -
XX
PS   Disclosure; Fig 2; 102pp; English.
XX
CC   The present cDNA sequence is the c form splice variant encoding human
CC   G-protein coupled receptor, NT2LP which is expressed in brain and
CC   ovaries. It is derived from human brain cDNA library. NT2LP
CC   participates in signalling pathways in cells that express
CC   this protein and shows homolgy to neurotensin-2 (NT2) receptors. This
CC   sequence can be used for drug screening, diagnosis, allelic screening,
CC   pharmacogenetic testing, forensic biology, chromosome mapping, tissue
CC   typing, detection of genetic alterations in NT2LP gene and as source of
CC   primers and probes. It has analgesic activity and can be used to treat
CC   disorders characterised by aberrant NT2LP expression or activity e.g.
CC   pain.
XX
SQ   Sequence 2850 BP; 699 A; 794 C; 745 G; 612 T; 0 other;


  Query Match             7.2%;  Score 97.6;  DB 21;  Length 2850;
  Best Local Similarity   49.2%;  Pred. No. 1.4e-13;
  Matches  256;  Conservative    0;  Mismatches  264;  Indels    0;  Gaps    0;

Qy     52 agtcatgtccccgagtttgaggtggccacctggatcaaaatcacccttattctggtgtac 111
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Db   1312 agcctggacgcccggctgggcgtggacactcgcctctgggccaaggtgctgttcaccgcg 1371

Qy    112 ctgatcatcttcgtgatgggccttctggggaacagcgccaccattcgggtcacccaggtg 171
          ||   |    || |   ||  ||    | |    ||    |  |    ||   |  ||||
Db   1372 ctctacgcactcatctgggcgctgggcgcggcgggcaatgcgctgtccgtgcacgtggtg 1431

Qy    172 ctgcagaagaaaggatacttgcagaaggaggtgacagaccacatggtgagtttggcttgc 231
          ||| ||  |   |          |  |    ||    ||||| || | ||  ||||   |
Db   1432 ctgaaggcgcgggccgggcgcgcggggcgcctgcgccaccacgtgctcagcctggcgctc 1491

Qy    232 tcggacatcttggtgttcctcatcggcatgcccatggagttctacagcatcatctggaat 291
          ||| | |  || || | ||  ||||| ||||  ||||| |||||||| || | |||
Db   1492 gcgggcctgctgctgctggtcggcgtgccggtggagctctacagcttcgtgtggttc 1551

Qy    292 cccctgaccacgtccagctacaccctgtcctgcaagctgcacactttcctcttcgaggcc 351
          | |    ||  |  |  |  |  |||| ||||       ||   ||| |   ||||
Db   1552 cactacccctgggtcttcggcgacctgggctgccgcggctactacttcgtgcacgagctg 1611

Qy    352 tgcagctacgctacgctgctgcacgtgctgacactcagctttgagcgctacatcgccatc 411
          |||  |||||| ||| |||||  ||||       || |||   |||||||  | | ||| |
Db   1612 tgcgcctacgccacggtgctgagcgtggcaggcctgagcgccgagcgctgcctagccgtg 1671

Qy    412 tgtcacccctcaggtacaaggctgtgtcgggaccttgccaggtgaagctgctgattggc 471
          || || ||| |  |   |       ||  |   ||  ||| |     |  ||||  | |
Db   1672 tgccagccccgcgtgcccgcagcctgctgacgccacgccggacccggtggctggtggcg 1731

Qy    472 ttcgtctgggtcacctccgccctggtggcactgcccttgctgtttgccatgggtactgag 531
          ||   |||| | ||||   |    | || |||||| ||    |   ||||||     ||
Db   1732 ctctcgtgggccgcctcgctcggcctcgccctgcccatggccgtcatcatggggcagaag 1791

Qy    532 taccccctggtgaacgtgcccagccaccggggtctcactt 571
            ||   || | ||  | |  | |  | | ||  | | | |
Db   1792 cacgaactcgagacggcggacggggagccggagcccgcct 1831


RESULT 11
AAZ45405
ID   AAZ45405 standard; DNA; 1092 BP.
XX
AC   AAZ45405;
XX
DT   27-MAR-2000  (first entry)
XX
DE   DNA encoding the puffer fish motilin receptor gene clone 75E7.
XX
KW   Motilin receptor; G-protein coupled receptor; MTL-R1; GPR38;
KW   spliced form; MTL-R1A; MTL-R1B; gastric motility disorder;
KW   functional defect; neurological disorder; scleroderma; colonoscopy;
KW   paraneoplastic syndrome; radiation induced dysmotility; diabetes;
KW   infection; stress-related motility disorder; psychgenic disorder;
KW   gastroparesis; gastro-oesophageal reflux disease; constipation;
KW   chronic idiopathis pseudo obstruction; acute faecal impaction;
KW   postoperative ileus; gallstones; infantile collic; diarrhoea;
KW   irritable bowel syndrome; non-ulcer dyspepsion; non-cardiac chest pain;
KW   endoscopy; duodenal intubation; ds.
XX
OS   Spheroides nephelus.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..1092
FT                   /*tag=  a
FT                   /product= "motilin receptor"
XX
PN   WO9964436-A1.
XX
PD   16-DEC-1999.
XX
PF   08-JUN-1999;   99WO-US12773.
XX
PR   12-JUN-1998;   98US-0089098.
XX
```

PA (MERI) MERCK & CO INC.
XX
PI Feighner SD, Patchett AA, Tan C, McKee K, MacNeil D, Howard AD;
PI Pong S, Smith RG;
XX
DR WPI; 2000-105868/09.
DR P-PSDB; AAY54147.
XX
PT Novel receptor protein for screening compounds used in treating
PT irritable bowel syndrome, constipation and other gastric conditions -
XX
PS Example 6; Fig 7; 44pp; English.
XX
CC The present sequence encodes a motilin receptor (clone 75E7) which
CC is related to the human motilin receptor of the invetion. The
CC specification describes a G-protein coupled receptor, designated
CC MTL-R1 (also GPR38). Two spliced forms of GPR38 exist, MTL-R1A (see
CC AAY54145) and MTL-R1B (see AAY54146). MTL-R1A is a functional seven
CC transmembrane domain form, and MTL-R1B is a truncated five
CC transmembrane domain, The MTL-R1 proteins are used to identify agonists
CC and antagonists which can be used for treating gastric motility
CC disorders, functional defects, disorders secondary to neurological
CC disorders e.g. scleroderma, paraneoplastic syndromes radiation induced
CC dysmotility, diabetes, infections, stress-related motility disorders,
CC psychgenic disorders, gastroparesis, gastro-oesophageal reflux disease,
CC constipation, chronic idiopathis pseudo obstruction, acute faecal
CC impaction, postoperative ileus, gallstones, infantile collic, irritable
CC bowel syndrome, non-ulcer dyspepsion, non-cardiac chest pain and
CC diarrhoea. They can also be used in the preparation for colonoscopy,
CC endoscopy and duodenal intubation.
XX
SQ Sequence 1092 BP; 205 A; 391 C; 290 G; 206 T; 0 other;

Query Match 7.1%; Score 96.2; DB 21; Length 1092;
Best Local Similarity 49.0%; Pred. No. 2.2e-13;
Matches 316; Conservative 0; Mismatches 323; Indels 6; Gaps 2;

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Qy      51 cagtcatgtccccgagtttgaggtggccacctggatcaaaatcacccttattctggtgta 110
           ||   | | || | | |  ||||   ||  ||    |     |||||| || |  ||
Db      66 cacggacgaccaccactacgagggctccctcttccccgcgtccaccctcatccccgtcac 125

Qy     111 cctgatcatcttcgtgatgggccttctggggaacagcgccaccattcgggtcacccaggt 170
           | |||  | || | ||   | |  | ||    | || || ||    |  || ||   |
Db     126 ggtcatctgcatcctcatcttcgtggtcggcgtgaccggcaacaccatgaccatcctcat 185

Qy     171 gctgcagaagaaaggatacttgcagaaggaggtgacagaccacatggtgagtttggcttg 230
           | ||| |       || || |||       |      || ||   ||  ||||
Db     186 catccagtacttcaaggacatgaagaccaccaccaacctgtacctgtccagcatggccgt 245

Qy     231 ctcggacatcttggtgttcctcatcggcatgcccatggagttctacagcatcatctggaa 290
           || ||| ||   ||  || || || || ||||| | ||  | ||| || |      | |
Db     246 gtccgacctc---gtcatcttcctctgcctgcccttcgacctgtaccgcctgtggaagta 302

Qy     291 tcccctgaccacgtccagctacaccctgtcctgcaagctgcacactttcctcttcgaggc 350
             | |     || | || |  || ||| | ||   ||  ||   | | |||||| |
Db     303 cgtgccgtggctgttcggcgaggccgtgtgccgc---ctctaccactacatcttcgaagg 359

Qy     351 ctgcagctacgctacgctgctgcacgtgctgacactcagctttgagcgctacatcgccat 410
           |||||  |  || ||  | || ||| |   | | || ||| | |||||||| | |||||
Db     360 ctgcacgtcggccaccatcctccacatcacggccctgagcatcgagcgctacctggccat 419

Qy     411 ctgtcacccctcaggtacaaggctgtgtcgggaccttgccaggtgaagctgctgattgg 470
           | |   |||| |||||  |||||   ||  |       |   |||  ||    | ||
Db     420 cagcttcccctcaggagcaaggtgatggtgaccaggagaagggtccagtacatcatcct 479

Qy     471 cttcgtctgggtcacctccgccctggtggcactgcccttgctgtttgccatgggtactga 530
           | | |||  |  | ||    ||  |||    |||  ||| ||     | ||    ||
Db     480 ggccctgtggtgcttcgccctggtgtcggccgctcccacgctcttcctggtcggggtgga 539

Qy     531 gtaccccctggtgaacgtgcccagccaccggggtctcacttgcaaccgctccagcacccg 590
           ||||  |   | ||     |||  | ||         |  ||||| | | |  ||  |
Db     540 gtacgacaacgagacgcaccccgactacaacacgggccagtgcaagcacacgggctacgc 599
```

Qy 591 ccaccacgagcagcccgagacctccaatatgtccatctgtaccaacctctccagccgctg 650
Db 600 catcagctcggggcagctgcacatcatgatctgggtgtccaccacctacttcttctgccc 659

Qy 651 gaccgtgttccagtccagcatcttcggcgccttcgtggtctacct 695
Db 660 gatgctgtgtctcctcttcctctacggctccatcgggtgcaagct 704

RESULT 12
AAF85450
ID AAF85450 standard; cDNA; 1092 BP.
XX
AC AAF85450;
XX
DT 23-JUL-2001 (first entry)
XX
DE Nucleotide sequence of a motilin receptor polypeptide.
XX
KW Motilin receptor; gastrointestinal disease; gastric motility disorder;
KW gastroparesis; irritable bowel syndrome; diarrhoea; ss.
XX
OS Sphaeroides nephelus.
XX
FH Key Location/Qualifiers
FT CDS 1..1092
FT /*tag= a
FT /note= "motilin receptor"
XX
PN WO200132710-A1.
XX
PD 10-MAY-2001.
XX
PF 25-OCT-2000; 2000WO-US29426.
XX
PR 29-OCT-1999; 99US-0162264.
XX
PA (MERI) MERCK & CO INC.
XX
PI Tan C, McKee K;
XX
DR WPI; 2001-343479/36.
DR P-PSDB; AAB68479.
XX
PT Novel polypeptides related to dog and rabbit motilin receptor
PT polypeptide, comprising unique regions from dog and motilin receptor
PT amino acid sequence, useful for identifying compounds for treating
PT diarrhoea in humans -
XX
PS Disclosure; Page 35; 42pp; English.
XX
CC The present sequence encodes a bacterial motilin receptor polypeptide.
CC The specification describes an unique sequence present in exon 1 of
CC the dog motilin receptor, which is not present in human or Sphaeroides
CC nephelus 75E7 motilin receptor sequences. The unique nucleic acid
CC sequence is useful for measuring the ability of a compound to affect
CC motilin receptor activity. Motilin receptor polynucleotides and
CC polypeptides are used to identify therapeutic compounds which are
CC useful for treating gastrointestinal diseases and disorders such as
CC gastric motility disorders, gastroparesis, irritable bowel syndrome,
CC and diarrhoea.
XX
SQ Sequence 1092 BP; 205 A; 391 C; 290 G; 206 T; 0 other;

Query Match 7.1%; Score 96.2; DB 22; Length 1092;
Best Local Similarity 49.0%; Pred. No. 2.2e-13;
Matches 316; Conservative 0; Mismatches 323; Indels 6; Gaps 2;

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Qy      51 cagtcatgtccccgagtttgaggtggccacctggatcaaaatcacccttattctggtgta 110
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Db      66 cacggacgaccaccactacgagggctccctcttccccgcgtccaccctcatccccgtcac 125
```

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Qy    111 cctgatcatcttcgtgatgggccttctggggaacagcgccaccattcgggtcacccaggt 170
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Db    126 ggtcatctgcatcctcatcttcgtggtcggcgtgaccggcaacaccatgaccatcctcat 185

Qy    171 gctgcagaagaaaggatacttgcagaaggaggtgacagaccacatggtgagtttggcttg 230
          | ||| |       || || |||      |      || ||   ||  ||||
Db    186 catccagtacttcaaggacatgaagaccaccaccaacctgtacctgtccagcatggccgt 245

Qy    231 ctcggacatcttggtgttcctcatcggcatgcccatggagttctacagcatcatctggaa 290
          || ||| ||   ||  || || || ||||| | ||  | ||| || | |      | |
Db    246 gtccgacctc---gtcatcttcctctgcctgcccttcgacctgtaccgcctgtggaagta 302

Qy    291 tcccctgaccacgtccagctacaccctgtcctgcaagctgcacactttcctcttcgaggc 350
            | |     || | || |  || ||| | ||   ||  ||   | | |||||||| |
Db    303 cgtgccgtggctgttcggcgaggccgtgtgccgc---ctctaccactacatcttcgaagg 359

Qy    351 ctgcagctacgctacgctgctgcacgtgctgacactcagctttgagcgctacatcgccat 410
          |||||  |  || ||  | || ||| |   | | || ||| | |||||||||| | |||||
Db    360 ctgcacgtcggccaccatcctccacatcacggccctgagcatcgagcgctacctggccat 419

Qy    411 ctgtcacccctt caggtacaaggctgtgtcgggaccttgccaggtgaagctgctgattgg 470
          | |   |||| |||||  |||||   ||  |       |   |||  ||    | ||
Db    420 cagcttcccccctcaggagcaaggtgatggtgaccaggagaagggtccagtacatcatcct 479

Qy    471 cttcgtctgggtcacctccgccctggtggcactgcccttgctgtttgccatgggtactga 530
             | | |||  |  | ||    ||  |||    |||  ||| ||     | ||    ||
Db    480 ggccctgtggtgcttcgccctggtgtcggccgctcccacgctcttcctggtcggggtgga 539

Qy    531 gtacccccctggtgaacgtgcccagccaccggggtctcacttgcaaccgctccagcacccg 590
          ||||  |   | ||     |||  | ||        |   ||||| | | |  ||  |
Db    540 gtacgacaacgagacgcaccccgactacaacacgggccagtgcaagcacacgggctacgc 599

Qy    591 ccaccacgagcagcccgagacctccaatatgtccatctgtaccaacctctccagccgctg 650
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Db    600 catcagctcggggcagctgcacatcatgatctgggtgtccaccacctacttcttctgccc 659

Qy    651 gaccgtgttccagtccagcatcttcggcgccttcgtggtctacct 695
          ||   |||  |    |  | ||| |||| || ||| |  | | ||
Db    660 gatgctgtgtctcctcttcctctacggctccatcgggtgcaagct 704
```

RESULT 13
AAV62449
ID AAV62449 standard; cDNA; 1342 BP.
XX
AC AAV62449;
XX
DT 6-JAN-1999 (first entry)
XX
DE Human neurotensin receptor type 2 encoding cDNA.
XX
KW Human; neurotensin receptor type 2; infection; bacterial; protozoan;
KW fungal; viral; HIV-1; HIV-2; cancer; anorexia; bulimia; asthma;
KW acute heart failure; Parkinson's disease; hypotension; hypertension;
KW urinary retention; osteoporosis; angina pectoris; myocardial infarction;
KW ulcer; allergy; benign prostatic hypertrophy; anxiety; schizophrenia;
KW psychotic; neurological disorder; manic depression; delirium; dementia;
KW severe mental retardation; dyskinesias; Huntington's disease;
KW Gilles de la Tourette's syndrome; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 53..1012
FT /*tag= a
XX
PN EP875568-A1.
XX
PD 04-NOV-1998.
XX
PF 01-APR-1998; 98EP-0302536.
XX
PR 02-APR-1997; 97US-0832399.
XX
PA (SMIK) SMITHKLINE BEECHAM CORP.
XX
PI Bergsma DJ, Shabon U;
XX
DR WPI; 1998-559434/48.
DR P-PSDB; AAW80598.
XX
PT New human neurotensin receptor type 2 polypeptide and polynucleotide
PT - useful as diagnostic reagents and for treating e.g. HIV infection,
PT cancer and osteoporosis
XX
PS Claim 4; Page 7-8; 26pp; English.
XX
CC The present sequence encodes human neurotensin receptor type 2 (hNR).
CC hNR polypeptides and polynucleotides are useful for diagnosing diseases
CC related to over or underexpression of hNR protein by identifying
CC mutations in the hNR gene using hNR probes, or determining hNR protein
CC or mRNA expression levels. hNR polypeptides are also useful for screening
CC for compounds which affect activity of the protein. These compounds can
CC be used for treatment to inhibit (antagonist) or enhance (agonist) hNR
CC activity, in addition to direct administration of hNR polypeptides to
CC treat conditions associated with a lack of hNR protein or direct
CC administration of antisense sequences to prevent expression. Gene therapy
CC may also be used to affect endogenous hNR polypeptide production.Vaccines
CC comprising hNR polypeptides can be used for inoculation against diseases,
CC and antibodies are useful for inducing an immune response to prevent and
CC treat disease, and isolating clones or purifying polypeptides by affinity
CC chromatography. Diseases prevented, diagnosed and treated include: HIV-1
CC or HIV-2 infections; pain; cancers; anorexia; bulimia; asthma; acute
CC heart failure; Parkinson's disease; hypotension; hypertension; urinary
CC retention; osteoporosis; angina pectoris; myocardial infarction; ulcers;
CC allergies; benign prostatic hypertrophy; and psychotic and neurological
CC disorders, including anxiety, schizophrenia, manic depression, delirium,
CC dementia, severe mental retardation and dyskinesias, such as Huntington's
CC disease or Gilles de la Tourette's syndrome. The hNR polypeptides are
CC also useful for mapping the gene to a chromosome, allowing gene
CC inheritance to be studied through linkage analysis.
XX
SQ Sequence 1342 BP; 271 A; 437 C; 380 G; 254 T; 0 other;

Query Match 7.0%; Score 95.8; DB 19; Length 1342;
Best Local Similarity 54.0%; Pred. No. 2.9e-13;
Matches 196; Conservative 0; Mismatches 167; Indels 0; Gaps 0;

```
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Db    261 accacgtgctcagcctggcgctcgcgggcctgctgctgctggtcggcgtgccggtgg 320

Qy    269 agttctacagcatcatctggaatcccctgaccacgtccagctacaccctgtcctgcaagc 328
          |  |||||||| || | |||   | |    ||  |  |  |  |  |  ||||  ||||
Db    321 aactctacagcttcgtgtggttccactacccctgggtcttccgcgacctgggctgccgcg 380

Qy    329 tgcacactttcctcttcgaggcctgcagctacgctacgctgctgcacgtgctgacactca 388
             ||   ||| |   ||||   |||  |||||| ||| |||||  ||||      || |
Db    381 gctactacttcgtgcacgagctgtgcgcctacgccacggtgctgagcgtggcaggcctga 440

Qy    389 gctttgagcgctacatcgccatctgtcacccctt caggtacaaggctgtgtcgggacctt 448
          ||   |||||||  | | ||| | || || ||| |  |    |       ||  |  ||
Db    441 gcgccgagcgctgcctagccgtgtgccagcccctgcgtgcccgcagcctgctgacgccac 500

Qy    449 gccaggtgaagctgctgattggcttcgtctgggtcacctccgccctggtggcactgccct 508
          ||| |     |  |||| | |   ||   |||| | ||||    |    | || ||||||
Db    501 gccggacccggtggctggtggcgctctcgtgggccgcctcgctcggcctcgccctgccca 560

Qy    509 tgctgtttgccatgggtactgagtacccccctggtgaacgtgcccagccaccggggtctca 568
          ||    |   ||||||     || ||   || | ||  | |  | |  | | ||  | |
Db    561 tggccgtcatcatggggcagaagcacgaactcgagacggcggacggggagccggagcccg 620

Qy    569 ctt 571
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```
Db    621 cct 623


RESULT  14
AAF85107
ID   AAF85107 standard; DNA; 729 BP.
XX
AC   AAF85107;
XX
DT   09-JUL-2001  (first entry)
XX
DE   Nucleotide sequence of human g-protein coupled receptor PFI-002.
XX
KW   G-protein coupled receptor; obesity; signal transduction; diabetes;
KW   metabolic disease; neurological disease; psychotherapy; dermatology;
KW   urogenital disease; inflammation; cancer; tissue repair; photoageing;
KW   skin pigmentation; frailty; osteoporosis; cardiovascular disease;
KW   gastrointestinal disease; infection; allergy; respiratory disease;
KW   sensory organ disorder; sleep disorder; hair loss; gene therapy;
KW   PFI-002; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..729
FT                   /*tag=  a
FT                   /product= "g-protein coupled receptor"
XX
PN   EP1090990-A1.
XX
PD   11-APR-2001.
XX
PF   06-OCT-2000; 2000EP-0308852.
XX
PR   08-OCT-1999;   99GB-0023888.
XX
PA   (PFIZ ) PFIZER LTD.
PA   (PFIZ ) PFIZER INC.
XX
PI   Harland L;
XX
DR   WPI; 2001-302046/32.
DR   P-PSDB; AAB68333.
XX
PT   New human G-protein coupled receptor (GPCR) polynucleotides and
PT   polypeptides, for screening modulators of the polypeptide useful in
PT   treating diseases associated with signal transduction, e.g. cancer,
PT   inflammation, or especially, obesity
XX
PS   Claim 1; Page 42; 53pp; English.
XX
CC   The present sequence encodes a human G-protein coupled receptor. The
CC   G-protein coupled receptor polynucleotide and polypeptide are useful
CC   as pharmaceuticals or in the manufacture of medicaments for the
CC   treatment of obesity. They are useful in the diagnosis and treatment
CC   of diseases and disorders associated with signal transduction such as
CC   obesity, diabetes and metabolic disease, neurological disease,
CC   psychotherapeutics, urogenital disease, inflammation, cancer, tissue
CC   repair, dermatology, skin pigmentation, photoageing, frailty,
CC   osteoporosis, cardiovascular disease, gastrointestinal disease,
CC   infection, allergy and respiratory disease, sensory organ disorders,
CC   sleep disorders and hair loss. The polynucleotide may also by useful
CC   in gene therapy.
XX
SQ   Sequence 729 BP; 135 A; 245 C; 167 G; 182 T; 0 other;


  Query Match             6.6%;  Score 89.4;  DB 22;  Length 729;
  Best Local Similarity   54.4%;  Pred. No. 7.7e-12;
  Matches  202;  Conservative    0;  Mismatches  166;  Indels    3;  Gaps    1;

Qy    137 tggggaacagcgccaccattcgggtcacccaggtgctgcagaagaaaggatacttgcaga 196
          |||||  ||  | ||   | | |||   || |||| | | | || |        || |||

Db    164 tgggggtcattggcaatgtcctggtgtgcctggtgattctgcagcaccaggctatgaaga 223

Qy    197 aggaggtgacagaccacatggtgagtttggcttgctcggacatcttggtgttcctcatcg 256
          |      |   || || |  | ||  ||||   ||| ||| || ||||  | ||| | |

Db    224 cgcccaccaactactacctcttcagcctggcggtctctgacctcctggtcctgctccttg 283

Qy    257 gcatgcccatggagttctacagcatcatctggaatcccctgaccacgtccagctacaccc 316
          | |||||| ||||| ||||    ||     | ||   ||    |  || | |    ||

Db    284 gaatgcccctggaggtctatgagatgtggcgcaactacccttttcttgttcgggc---ccg 340

Qy    317 tgtcctgcaagctgcacactttcctcttcgaggcctgcagctacgctacgctgctgcacg 376
          ||  |||| |  |  | ||   |||||| ||| ||    ||| |||  |  | ||   |

Db    341 tgggctgctacttcaagacggccctctttgagaccgtgtgcttcgcctccatcctcagca 400

Qy    377 tgctgacactcagctttgagcgctacatcgccatctgtcacccttcaggtacaaggctg 436
          |    ||  ||||| | |||||||||| | ||||||   ||||| ||| |   |||

Db    401 tcaccaccgtcagcgtggagcgctacgtggccatcctacacccgttccgcgccaaactgc 460

Qy    437 tgtcgggaccttgccaggtgaagctgctgattggcttcgtctgggtcacctccgccctgg 496
          |      |   ||| ||       | |  | ||| |||||||||| |  ||||| ||

Db    461 agagcacccggcgccgggccctcaggatcctcggcatcgtctggggcttctccgtgctct 520

Qy    497 tggcactgccc 507
          |  | ||||||
Db    521 tctccctgccc 531


RESULT  15
AAH50977/c
ID   AAH50977 standard; DNA; 801 BP.
XX
AC   AAH50977;
XX
DT   28-AUG-2001  (first entry)
XX
DE   Human nGPCR15 coding sequence.
XX
KW   G protein-coupled receptor; nGPCR; seven transmembrane receptor;
KW   signal transduction; schizophrenia; thyroid disorder; renal failure;
KW   rheumatoid arthritis; CNS disorder; infection; metabolic disease;
KW   cardiovascular disease; proliferative disorder; hormonal disorder;
KW   neurological disorder; neuronal disorder; Alzheimer's disease; cancer;
KW   attention deficit-hyperactivity disorder/attention deficit disorder;
KW   Parkinson's disease; migraine; senile dementia; inflammatory disease;
KW   rheumatoid arthritis; autoimmune disorder; respiratory ailment;
KW   neuroprotective; ds.
XX
OS   Homo sapiens.
XX
PN   WO200136473-A2.
XX
PD   25-MAY-2001.
XX
PF   16-NOV-2000; 2000WO-US31581.
XX
PR   16-NOV-1999;   99US-0165838.
PR   17-NOV-1999;   99US-0166071.
PR   19-NOV-1999;   99US-0166678.
PR   28-DEC-1999;   99US-0173396.
PR   22-FEB-2000; 2000US-0184129.
PR   28-FEB-2000; 2000US-0185421.
PR   28-FEB-2000; 2000US-0185554.
PR   02-MAR-2000; 2000US-0186530.
PR   03-MAR-2000; 2000US-0186811.
PR   09-MAR-2000; 2000US-0188114.
PR   17-MAR-2000; 2000US-0190310.
PR   21-MAR-2000; 2000US-0190800.
PR   20-APR-2000; 2000US-0198568.
PR   02-MAY-2000; 2000US-0201190.
PR   08-MAY-2000; 2000US-0203111.
PR   25-MAY-2000; 2000US-0207094.
XX
PA   (PHAA ) PHARMACIA & UPJOHN CO.
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XX
PI Vogeli G, Wood LS, Parodi LA, Hiebsch RR, Lind P, Slightom J;
PI Schellin KA, Kaytes PS, Bannigan CM, Ruff V, Sejlitz T, Huff RM;
XX
DR WPI; 2001-389826/41.
DR P-PSDB; AAG80937.
XX
PT New G protein-coupled receptor (nGPCR-x) and its encoding
PT polynucleotide useful for diagnosing and treating e.g. schizophrenia -
XX
PS Claim 4; Page 78-79; 261pp; English.
XX
CC The present invention relates to novel G protein-coupled receptors
CC (nGPCRx; where x is 1, 3, 4, 5, 9, 11, 12, 14-18, 20, 21, 22, 24, 27,
CC 28, 31-38, 40, 41, 53-60) and their coding sequences. The present
CC sequence is the coding sequence for one such G protein-coupled receptor.
CC GPCRs are also known as seven transmembrane receptors and function in
CC signal transduction. The nGPCRx coding sequences are useful for
CC screening a human to diagnose a disorder affecting the brain or a genetic
CC predisposition, specifically schizophrenia. nGPCRx are useful for
CC identifying compounds useful for treating schizophrenia. Detection of
CC nGPCRx in a sample is useful as a diagnostic tool for diseases or
CC disorders e.g. thyroid disorders, renal failure, rheumatoid arthritis,
CC CNS disorders, infections such as HIV-1, metabolic and cardiovascular
CC diseases, proliferative disorders and hormonal disorders. Modulators of
CC nGPCRx activity have the utility for treating neurological disorders,
CC including schizophrenia, ADHD/ADD (attention deficit-hyperactivity
CC disorder/attention deficit disorder), and neuronal disorders such as
CC Alzheimer's disease, Parkinson's disease, migraine and senile dementia.
CC Additional disorders include inflammatory conditions (e.g. Crohn's
CC disease), rheumatoid arthritis, autoimmune disorders, cancers,
CC respiratory ailments such as asthma, and inflammatory diseases e.g.
CC inflammatory bowel disease.
XX
SQ Sequence 801 BP; 200 A; 187 C; 261 G; 153 T; 0 other;

Query Match 6.6%; Score 89.4; DB 22; Length 801;
Best Local Similarity 54.4%; Pred. No. 7.9e-12;
Matches 202; Conservative 0; Mismatches 166; Indels 3; Gaps 1;

```
Qy    137 tggggaacagcgccaccattcgggtcacccaggtgctgcagaagaaaggatacttgcaga 196
          |||||  ||  | ||   | | |||   || |||| | | | || |        || |||
Db    632 TGGGGGTCATTGGCAATGTCCTGGTGTGCCTGGTGATTCTGCAGCACCAGGCTATGAAGA 573

Qy    197 aggaggtgacagaccacatggtgagtttggcttgctcggacatcttggtgttcctcatcg 256
            |    |   || || |  | ||  ||||   ||| ||| || ||||  | ||| | |
Db    572 CGCCCACCAACTACTACCTCTTCAGCCTGGCGGTCTCTGACCTCCTGGTCCTGCTCCTTG 513

Qy    257 gcatgcccatggagttctacagcatcatctggaatcccctgaccacgtccagctacaccc 316
          | |||||| ||||| ||||    ||     | ||   ||     |  || | |     ||
Db    512 GAATGCCCCTGGAGGTCTATGAGATGTGGCGCAACTACCCTTTCTTGTTCGGGC---CCG 456

Qy    317 tgtcctgcaagctgcacactttcctcttcgaggcctgcagctacgctacgctgctgcacg 376
          ||  |||| |  |  | ||   |||||| ||| ||    ||| |||  |  | ||   |
Db    455 TGGGCTGCTACTTCAAGACGGCCCTCTTTGAGACCGTGTGCTTCGCCTCCATCCTCAGCA 396

Qy    377 tgctgacactcagctttgagcgctacatcgccatctgtcacccccttcaggtacaaggctg 436
          |    ||  ||||| | ||||||||| | ||||||   ||||| ||| |   |||
Db    395 TCACCACCGTCAGCGTGGAGCGCTACGTGGCCATCCTACACCCGTTCCGCGCCAAACTGC 336

Qy    437 tgtcgggaccttgccaggtgaagctgctgattggcttcgtctgggtcacctccgccctgg 496
            |       |   ||| ||       | |  | ||| |||||||||| |  |||||  ||
Db    335 AGAGCACCCGGCGCCGGGCCCTCAGGATCCTCGGCATCGTCTGGGGCTTCTCCGTGCTCT 276

Qy    497 tggcactgccc 507
          |  | ||||||
Db    275 TCTCCCTGCCC 265
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